



IDEAL SPACE DESIGN FOR THE ELDERLY OF THE FUTURE

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ABSTRACT

Ideal space design for the elderly of the future is studied at this study. First part of this study is introduction. The aim is to determine the aspects about the old age and the adults who live their middle-age in a modern life style. It is aimed to learn their aspects and expectations about the old age, to get the principles of making ideal space design for the elderly of the future. In second part; the basic definitions about the concepts of 'old age' are explained. Then, the relationship between adult-child-elderly is studied. The importance of the relationship between the generations is explained. In third part; the condition and living standards of elderly are specifically analyzed. Then, the alternatives of space designs from different countries, designed for the elderly are examined and the changes of spaces from the year 1950 to 2000 are observed. In conclusion; obtained findings are evaluated and it is explained that as the population of the elderly increases, the importance of the requirements of the elderly increases.

Keywords: Architecture, Elderly, Adulthood, Childhood, Human-Centered Design.

1. INTRODUCTION

The global aging of the world's population and the steady increase in the elderly population have increased the interest in aging in the last two decades (Topaçvediğerleri, 2006). Life expectancy at birth in the world was 73 years out of 66 years, and according to World Health Organization estimates, life expectancy at birth is 75 in 2025 (Güner, P. ve Güler, Ç., 2002/ D.S.Ö., 1998/ Şafak, Ş., Erkalvediğerleri, 2005). As a result of the prolongation of the average human lifespan, the increase in the elderly population in society suggests that the problems of the elderly should be emphasized. The main reason for this is that everyone is going to age in the future. That is why people are advocating that all older people should be heeded to the needs of the old age.

Factors that confirm that the space privatized for the elderly will gain importance in the future increases day by day. These factors influence the architectural design of the spaces. The number of people aged 65 and over is increasing by approximately 2000 a day (Mathiasen G., Noakes E.H., 1959). The large increase in the proportion of older people shows that in the coming years, it will be necessary to build a large number of dwellings, especially for such people. However, the needs of older people can be very different. Some people do not want to leave their home for the rest of their lives, and many of them have a smaller, easier-to-maintain housing than family housing, they can live a more active and independent life until they get older. Some less active ones are specially designed, but not necessarily in need of care and attention by others. They may be independent if they have a housing where they can get help if needed (Bayazit, N., 1969). As a

result, the types of housing that older people will prefer to live can vary widely. It is aimed to design ideal spaces that will make them happy in the residence where they live.

1.1. Purpose of the study

The aim of the study is to recognize the old age and to design suitable designs for the elderly of the future. It is aimed to get rid of stereotyped judgments about the old age period and to be able to meet current needs. Exploring the drawbacks of prejudices about the old age is the purpose of the study. Today's variable judgments, changes in technology, design concept have been changing. The rapid increase in the criteria of ideality of the place changed the thoughts of the people about the old age and the expectations of the old age. Today, due to the structural structure that logic provides, it is possible to obtain better results in designing problems (Alexander, C., 1964).

The purpose is to design the ideal space design for the elderly of the future, while succeeding in not abstracting old people from life. This is because; the elderly who have been torn from the city and moved away from their loved ones will not reach the ideal life. Like every living thing, human beings are conditioned by the environment in which they live. Man has the ability to use, change and adapt himself to this encompassing environment. But at the same time and necessarily it is being changed and shaped by this environment (Yörükan, A., 1966). The aim is to prove that the elderly can survive the ideal life in an environment shaped by using ideal spaces. By determining the ages of the adults and their expectations from the aging period, principles will be set for the ideal space design for the elderly of the future.

2. INVESTIGATION OF ADULT-CHILD-AGED RELATIONSHIPS

2.1. Adulthood and old age relations

Turkey, as a country with a young population, life expectancy is expected to increase in the future of the country's population (State Planning Organization (Devlet Planlama Teşkilatı), 2007). Increasing number of elderly people should be active participation of the elderly in order to avoid loss of work force. Therefore, adult generation-old generation solidarity gains importance. Within the scope of the study; strengthening equality and solidarity among generations.

The importance of intergenerational sharing which is emphasized in Table-1 is important. Situations in which the adults and the elderly mutually benefit from each other are listed as the situations in which the elderly benefit the adults and the situations in which the elderly benefit to the adults. In the columns of the chart, the responsibilities of the adults, the elderly, or both generations are listed. For example, in order for generations to benefit from each other, adults need to help with physical needs of the elderly, and the elderly should help adults with material needs. Adults, on the other hand, should take advantage of the capacity and counseling of older generations, taking into account the benefits of their aging experiences. Occupational experiences and information sharing are among the situations where the elderly benefit adults. Besides, the adult generation should help the elderly to access the information and encourage the elderly to create suitable working environments for them. The information about the elderly, science and technology should be kept up to date. This will increase the loyalty of the old. As a result; sharing the knowledge and experience of the generations are the most important (Table-1).

Findings from the research across the country indicate that the elderly population is dependent on the family members in their immediate surroundings, whether in the same house or very near (Ünalın, T., 2000). In Aykan and Wolf's research, it is reported that the number of core families increased with modernization. Despite this increase, the reasons for their choice to live close to the way the children of the elderly, is reported to have a strong bond between the elderly and children in Turkey (2000).

Table-1. Examination of adult-child-elderly relationships.

	Adult hood	Adult hood - Old Age	Old Age
Situations Where Adults and Elders Benefit Mutually	PhysicalNeeds	The Child	Financial Needs
	Financial Needs	Family / Relatives	childcare
	PhysicalFatigue	Sports / Health	MentalFatigue
Situations Where Elders Benefit Adults	Career / Competing	Nature Love- AnimalLove	Professional Experience
	Military / Marriage / Business	Art	Experience
	Information / Education	Culture	Knowledge Accumulation / Advisory
Situations Where Adults Benefit from Elders	Assurance / Help	EnvironmentalCharacteristics	Healthneeds / medicine
	BeingBusy / Timelessness	Food	Leisure Time
	Current Information / Science / Technology	Country	SharingNeeds

2.2. Relations between childhood and old age

The greatest emotional bond between older adults and adults are children. Children are also a step between adults / young people and old people to maintain and develop intergenerational relationships. Elderly individuals are becoming more and more childish and communication with children is becoming more important. Therefore, it is not possible to describe a place in which the grandchildren can not be found in the representation of the ideal space to be promised for the elderly. At the beginning of the design, it is essential to create spaces that allow children to walk as freely as the elderly, including children's interests.

The bond between family members in Turkey is very strong. The preferences of the elderly to determine their habitat also show that there are differences when compared with developed countries. The general survey results show that 7 out of every 10 elderly live in the same house with their children or in the same building, street or neighborhood with their children. Although there is no significant difference between the sexes, it is understood that the general preference is to live close to children or children. Such a preference may be considered to be highly advantageous both socially and economically for the children of the elderly as well as the elderly (DPT, 2007). Therefore; places, institutions, elderly houses that only cover elderly people and are not suitable for use by other age groups are insufficient to give true happiness in psychological terms.

3. EXAMPLES OF SPACES DESIGNED FOR THE ELDERLY

In this section, it is aimed to follow the developments in the elderly places in world scale and in chronological order. When examining examples of places designed for elderly people abroad, the scope of time of study; was determined after World War II. The reason for this is that no progress has been made in the development of services provided for the elderly at the beginning of the 20th century. Few studies have been made narrow and comprehensive (Pakdil, O., 1992). There have been no positive developments about the places for the elderly these years. Between 1910 and 1940, extensive research was not conducted and no progress was made in the policies and services being followed. However, II. During the post-World War II rehabilitation work, studies on the problems of the elderly have accelerated and the importance given to social issues has increased. The elderly population has gained social and economic rights and has various services.

3.1. 1950's Review

Since the 1950's, researches on old people have been done. Governments have begun to recognize the problems of old age and have provided many services for the elderly (Figure-1). The elderly now form an important part of society with their own problems and precautions to be taken (Figure-2).

3.1.1. Residents of The Elderly in Berlin



Figure-1. The appearance of the residents of the elderly in Berlin from the court of the dwelling (Sürmen, Ş., 1998).

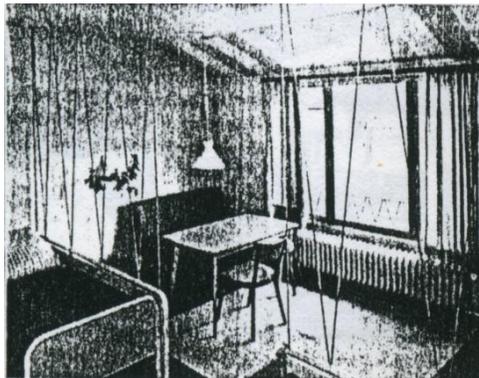


Figure-2. An example of a four-bedded room belonging to the residents of the elderly in Berlin (Sürmen, Ş., 1998).

3.2. 1960's Review

In the 1960s, studies on social relations among the elderly have been carried out. The problems and needs of the elderly population have been researched. In international studies, the social

isolation of the elderly and the problems of living alone have been examined. In these studies, it has been decided that social policy should change in order for the elderly to live independently in society. As a result of all these studies, it was understood that the studies made up to that time did not meet the real needs of the elderly. It has been decided that more health and social services should be provided (Figure-3).

3.2.1. Residents of The Elderly in Hamburg

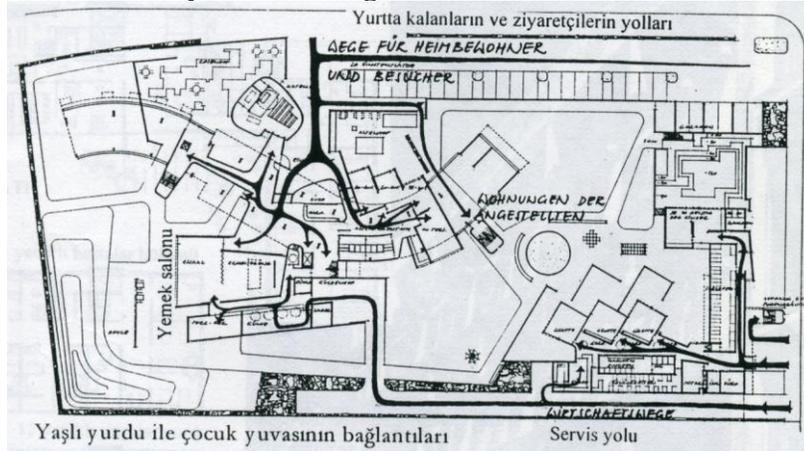


Figure-3. Site plan of the residents of the elderly in Hamburg (Sürmen, Ş., 1998).

3.3. 1970's Review

In the 1970's, various service networks were established. Thus, alternative service types for elderly people with different needs have become available. The importance given to health services has increased compared to previous years (Figure-4).

3.3.1. Residents of The Elderly in Switzerland

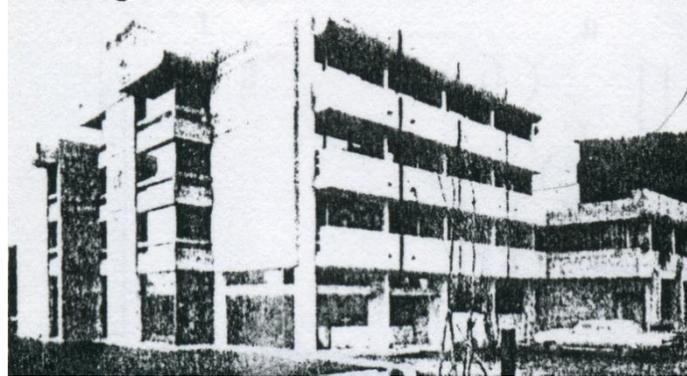


Figure-4. Exterior view of the residents of the elderly in Switzerland (Sürmen, Ş., 1998).

3.4. 1980's Review

In the 1980s, services were provided to determine requirements and to meet these requirements for the elderly. In these years, specially designed houses for elderly people have gained importance. Houses called 'Sheltered Housing', easy to live, easy to care, comfortable and suitable for the properties of the elderly have been made (Figure-5).

3.4.1. Residents of The Elderly in Texas, Austin

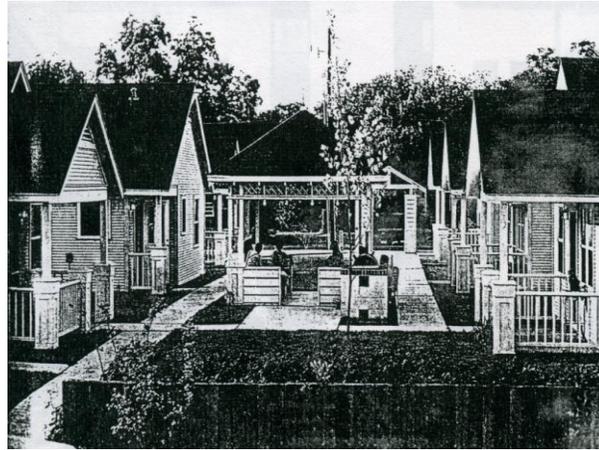


Figure-5. Exterior view of the residents of the elderly in Texas, Austin (Sürmen, Ş., 1998).

3.5. 1990's Review

In the 1990's, positive developments in the field of health have occurred. Although they were not very developed and equipped, treatment rooms have begun to be built in the residents of the elderly. The development of day care services has begun from these years (Figure-6).

3.5.1. Residents of The Elderly in Germany, Oberhausen



Figure-6.Exterior view of the residents of the elderly in Germany, Oberhausen (Sürmen, Ş., 1998).

3.6. 2000's Review

In 2000, it was observed that expectations from elderly dwellings and elderly housing showed a rapid increase. The reason for this is the rise of living standards and the development of technology all over the world. It is expected that the residents of the elderly will carefully consider every detail and present various services to the elderly(Figure-7). The most important difference compared to previous years has been realized about health. In the dormitories, hospital services were provided which should contribute positively to the mental and physical health of the elderly(Figure-8).

3.6.1. Residents of The Elderly in America, California Lake Forest



Figure-7.Recreation Room and View from The Garden of Lake Forest Residents for the Elderly (Url-1).



Figure-8.Treatment methods applied in Lake Forest Residents for the elderly (Url-1).

4. CONCLUSION

Basic definitions and concepts related to old age are explained in the scope of the study. When the definition of elder hood is made, it is stated that the elderly are grouped according to their age range and care level as follows:

- Seniors who are independent and who can survive without needing the help of others
- Healthy and almost independent elderly people
- Older people who need continuous care

Then adult-child-elderly relationships were examined. This section emphasizes the importance of intergenerational communication and mentions the necessity for the elderly to share the space with their families and loved ones so that the space they live in is ideal. Lastly, it is aimed to follow the developments in the elderly places in world scale and in chronological order. Examples of places designed for elderly were examined.

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